

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
CLEAN WATER PROGRAM**

APS Id	343662	Site Id	487067
Client Id	45397	Auth. Id	899339
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FACT SHEET / STATEMENT OF BASIS

NAME OF APPLICANT <u>Big Sandy Oil Company</u>	PROJECT LOCATION <u>Cranberry Township, Venango County</u>	APPLICATION NUMBER <u>PA0222011</u>
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BRIEF DESCRIPTION OF PROJECT AND DISCUSSION

This application is for a renewal of a Part I NPDES Permit, for an existing discharge of Industrial Waste from the treatment of stripper oil well production fluids.

This is a minor discharge from a facility that is not subject to any ELGs.

The EPA Waiver is in effect.

The SIC code for this facility is 1311 - Oil and Gas Extraction

The NAICS code for this facility is 211111 - Crude Petroleum and Natural Gas Extraction

The Mailing Information is:	The Permittee Information is:	The Site Information is:
Mr. James E. Cochran, Jr. Big Sandy Oil Company PO Box 269 Franklin, PA 16323	Big Sandy Oil Company PO Box 269 Franklin, PA 16323	Big Sandy Project 5 Timberline Treatment Facility End of West First Street near Oil City Cranberry Township, Venango County

The Responsible Official is: Mr. James E. Cochran, Jr., Owner - phone: 814-437-2344

Act 14 - Proof of Notification was submitted.

The PPC Plan was implemented in 1996. The PPC Plan was revised during the renewal application preparation in 2011.

The Permittee signed up for eDMR in 2011.

The Permittee had received an NOV for effluent violations for Total Suspended Solids and Total Iron, and an NOV for not submitting DMRs and operational deficiencies. The violations were settled with the signing of a CACP on March 26, 2013. The requirements of this permit, when met, will continue to protect the uses of the receiving stream.

This facility was authorized to discharge Total Dissolved Solids (TDS) prior to August 21, 2010. It is considered an Authorized Load and is exempt from the treatment requirements under Chapter 95.10.

RECOMMENDATION AND ACTION

Approve - Issue By Region	Approve - Issue By Central Office	Refuse	Signature	Date
X			STEPHEN A. McCAULEY, E.I.T. REVIEWING ENGINEER	DRAFT FINAL
X			DAVID G. BALOG, P.E. PERMITS SECTION CHIEF	
X			JOHN A. HOLDEN, P.E. REGIONAL MANAGER	

PERMIT CONDITIONS:

STANDARD: I. A. Right of Way B. Department revocation of permit C. Solids Handling	D. NPDES Permit Supersedes WQM Permits E. Modification of Revocation of Permit for changes to BAT or BCT
SPECIAL: II. Requirement to Use eDMR System III. Chapter 95 Treatment Requirements	

Big Sandy Oil CompanySite Name: **Big Sandy Project 5 Timberline Treatment Facility**

Cranberry Township, Venango County

NPDES Permit No. **PA0222011**

Fact Sheet (continued)

Receiving Stream: Allegheny River (Stream Code: 42122)

Watershed: 16-E

Protected Water Uses (Statewide plus): Warm Water Fishes
 Aquatic Life
 Water Supply
 Recreation

Secondary Waters: Ohio River (stream code 32317)

Nearest Downstream potable water supply (PWS): Aqua Pennsylvania, Inc. - Emlenton intake on the Allegheny River

Distance downstream from the point of discharge: 39.0 miles (approximate)

Requirements necessary: None, significant dilution is available

Permitted treatment consists of: An oil/water separator followed by a passive wetlands treatment system consisting of a 5,236 gallon (WQM Permit no. 6196601) Oxidation/sedimentation/flow equalization tank, two 2,244 gallon (each) aerobic wetlands, and an 8,789 gallon anaerobic treatment tank

The proposed discharge limitations are based on the following: The limits for Total Suspended Solids are technology-based on the Oil & Gas Wastewater Permitting Manual. The requirement that acidity be less than alkalinity is also technology-based on the Oil & Gas Wastewater Permitting Manual (monitoring for Alkalinity is therefore required for the acidity requirement). The pH and Oil and Grease limits are based on Chapter 95. The Total Iron limit is technology-based on Chapter 93.7. The TDS mass loading limit is based on Chapter 95.10 using data prior to August 21, 2010 - TDS concentrations are monitor only.

Permit Requirements:For Outfall: **001** Latitude: **41° 24' 17.9"** Longitude: **79° 44' 11.2"** River Mile Index: **129.1** Stream Code: **42122**which receives wastewater from: **treated petroleum contaminated wastewater from stripper oil well production operations.**Discharges to: **the Allegheny River.**Monthly average daily flow: **0.006** million gallons per day (MGD).

Parameters	Loadings (lbs/day)		Concentrations (mg/l)			Monitoring	
	Monthly Average	Weekly Average	Monthly Average	Daily Maximum	Instant Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Report					2/Month	Measured
Total Suspended Solids			30		60	2/Month	Grab
Oil and Grease			15		30	2/Month	Grab
Total Iron			3.5		7.0	2/Month	Grab
Acidity *			Report			2/Month	Grab
Alkalinity			Report			2/Month	Grab
Total Dissolved Solids	4,800		Report		Report	2/Month	Grab
pH	Within limits of 6.0 to 9.0 standard units at all times					2/Month	Grab
Sulfate	Report Avg Qrtly		Report Avg Qrtly			1/Quarter	8-Hr Comp.
Chloride	Report Avg Qrtly		Report Avg Qrtly			1/Quarter	8-Hr Comp.
Bromide	Report Avg Qrtly		Report Avg Qrtly			1/Quarter	8-Hr Comp.

* - Total Acidity shall be less than Total Alkalinity.

Samples taken at the following location: Outfall 001.

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Fact Sheet (continued)

The monitoring frequency for all parameters at Outfall 001 was increased from 1/Month to 2/Month due to the fact that monthly average concentrations were required to be reported. With only one sample per month, an average could not be obtained in the past.

The maximum concentration sample result reported for this facility prior to August 21, 2010, was reported in the 2006 WQPR. That concentration was 95,904 mg/l (see attached), which results in a mass loading of 4,799 lbs/day. For this NPDES Permit, in order to remain exempt from the treatment requirements of Chapter 95.10, the monthly average mass loading must remain below 4,800 lbs/day (rounded for simplicity).

ADDENDUM:

On April 22, 2013, Brian P. Trulear of the US EPA, forwarded comments pertaining to the second Draft NPDES permit (see Attachment 1). A summary of these comments and the Department's responses follows:

Comment 1:	We recognize the small instream waste concentration that this discharge creates. However, the high concentration of TDS (over 95,900 mg/l based on 4,800 lbs/day at 6,000 gals/day) allowable under the exemption from Chapter 95.10 indicates the possibility of high concentrations of chlorides, sulfates, or other pollutants. Therefore, we recommend monitoring of some of the pollutants common in oil and gas extraction wastewaters; at a minimum chloride, sulfate and bromide.
Response 1:	Quarterly monitoring was added for Chloride, Sulfate, and Bromide. The Permittee was emailed a copy of the revised NPDES Permit and accepted the revisions via email (see Attachment 2).

Please refer to the following PDF to view Attachments 1-3 for this Fact Sheet:



Adobe Acrobat
Document